

Watershed **MANAGEMENT**



Drought Information Center

March 29, 1999

The past week brought little precipitation to the Commonwealth. Along the northern tier counties, totals ranged from about 0.1 inch in Erie and Crawford through Tioga Counties and from there increased eastward to about 0.3 inches in Wayne County. The Delaware River basin received most of the week's precipitation, ranging from about 0.2 inches in the lower and middle basin to about 0.3-0.4 inches in the upper basin. The eastern side of the Susquehanna River basin received about 0.1-0.2 inches, with the greater totals occurring along the Delaware basin boundary. With little more precipitation forecast for the remainder of the month, March will likely end as a deficit month in the western Ohio basin, with deficits exceeding 1.0 inch in the western border counties. The eastern Ohio basin will be about even to about 0.5 inch below normal. The Susquehanna basin will likely show surplus precipitation in the 0.8-1.5 inch range, with the greater surpluses in the Ridge and Valley area. The Delaware basin appears to be headed toward monthly surpluses in the 1.0-2.0 inch range, with the greatest in the southeast.

In the Delaware River basin, stream flows have declined considerably from the after-storm peaks we were seeing a week ago. The Delaware River at Trenton is down from 32,700 cubic feet per second (cfs) a week ago to 17,000 cfs this morning. The Lackawaxen River at Hawley is down from 1790 to 849 cfs; the Lehigh River at Bethlehem decreased from 4700 to 3290 cfs; and the Schuylkill River at Philadelphia is down from 21,800 cfs to 4390. Brandywine Creek at Chadds Ford, in the Christina River watershed dropped from 3470 to 391 cfs. The majority of gages in the basin are reading well below normal.

In the Susquehanna River basin, flows in the upper main stem Susquehanna River are increased, while flows in the lower main stem have decreased. The river at Towanda is up from 16,900 to 19,400 cfs, while flows at Harrisburg have declined from 74,800 to 60,300 cfs. The Lackawanna River at Old Forge is down from 1120 to 869 cfs. In the West Branch Susquehanna watershed, flows are mixed, probably reflecting continued runoff from snowmelt. The main stem river is generally down as reflected by the flows at Lock Haven, down from 11,900 to 11,000, and at Lewisburg, down from 21,200 to 16,800 cfs. The Juniata River has declined noticeably at Newport, from 12,000 to 5630 cfs. In the lower basin, the Conestoga River at Conestoga reflects general conditions, down from 1410 to 704 cfs. The majority of Susquehanna basin gages are reading below normal also.

In the Ohio River basin, the main stem Allegheny River has declined also, with flows at Natrona down from 29,900 to 21,800 cfs. The Kiskiminetas River at Vandergrift is down from 7000 to 6110 cfs, and the Monongahela River has receded to about half last week's flows, down at Braddock from 34,400 to 16,900 cfs. The Beaver River likewise has decreased by about half, from 3010 to 1580 cfs. The Ohio River at Sewickley is flowing at 40,700 cfs, compared to 64,700 last week. With only a very few

exceptions, primarily in the Monongahela watershed, gages in the Ohio basin are well below normal.

Ground water declined slightly in half of the daily monitoring wells during the week, predominately in the Susquehanna and Ohio basins.

The three-day forecast indicates the likelihood of no precipitation in Pennsylvania. The five-day outlook shows the possibility of up to 1.5 inch in the extreme southwest, decreasing northeasterly to less than 0.1 inch in the extreme northeast. The 5-10 day forecast shows an additional 0.5-1.0 inch in the Ohio and lower Susquehanna basins and 1.0-1.5 inch in the Delaware and upper Susquehanna basins. Temperatures are to be above normal in the 40-50 degree range.

We continue in a statewide drought "watch." This week, we will be evaluating month-end data to reassess that status. We are still hopeful that our criteria will indicate nearly complete recovery in most of the state by early April.